DOCUMENT RESUME

ED 066 711 24 CS 000 122

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TITLE A Project to Evaluate the Effectiveness of Pre-Phonic Training Between Kindergarten and First Grade Levels (Project PEEP). Final Report.
INSTITUTION New Bedford Public Schools, Mass.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-0-A-059
PUB DATE 72
GRANT OEG-1-71-0005(509)
NOTE 67p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Beginning Reading; *Decoding (Reading); *Kindergarten; Phonics; Reading Development; Reading Diagnosis; Reading Instruction; Reading Materials; Reading Readiness; *Reading Research; Reading Skills; Teacher Aides

ABSTRACT

The effectiveness of prephonic training between kindergarten and first grade levels as a tool for acquiring reading skills was explored throughout the public school system in the city of New Bedford, Massachusetts. A sample population of 260 kindergartners was identified as having potential learning difficulties by the results shown on the Slingerland, Mahon and Metropolitan Readiness Tests. This sample was randomly assigned to either Group one, experimental, or to Group two, control. The research design applied was the Campbell and Stanley number 6, posttest two group design. Group one received the Mahon System of assistance given by teacher aides trained by Dr. Mahon. Group two received only the assistance based upon current reading materials used in the entire school system. Time allotment was half an hour a day for each group. The results of the posttest confirmed the value of prephonic training where early diagnosis had identified potential learning difficulties. As a by product, the areas of early identification found to be most appropriate for individualized instruction were revealed. [Marginal reproducibility of some pages.] (Author)

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FINAL REPORT
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A PROJECT TO EVALUATE THE EFFECTIVENESS OF PRE-PHONIC TRAINING BETWEEN KINDERGARTEN AND FIRST GRADE LEVELS.

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Report submitted:
December 21, 1971
and resubmitted:
June 16, 1972

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
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(PROJECT PEEP)

Kathleen B. Marko; Florence L. Mahon and George A. Nigro

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June 16, 1972

The research reported herein was performed pursuant to a grant, OEG-1-71-0005(509), with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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PREFACE

The Project to Evaluate the Effectiveness of Pre-phonic Training between Kindergarten and First Grade, known as Project PEEP, was completed in so far as the student instruction, by June 1971.

In the following pages are the results and details of the completed study, of which the data was computed, analyzed and reported in December 1971 and resubmitted in June 1972.

Early diagnosis has proved predictable of later performance and its value is indicated in the results and conclusions. Pre-phonic training has also proved effective in achieving reading success. Therefore, it is the opinion of the project personnel that more opportunities should be given to the child between kindergarten and first grade levels to express his weaknesses (through early diagnosis) and to receive prescriptive teaching, that is, early pre-phonic training, for identified weaknesses.

Credit is given to Dr. Florence Mahon for use of her copyrighted materials (see appendix). Other standardized tests used are credited to their authors in the text.

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ACKNOWLEDGMENTS

In particular, we wish to thank the following people for their distinctive and individual contributions: Dr. James R. Hayden, Superintendent of Schools, New Bedford, for sponsoring the Project; Mrs. Stasia Gorczyca, Principal, Charles S. Ashley School, for providing office space and supplementary services; Mr. Carreira, Principal of the Parker School, for providing similar services when a move was necessitated; Mr. Norman Tripp, Mrs. Grace Frey and Mrs. Ellen Shepherd, for conscientious supplementary services; and to the minister of St. John's Church for providing rooms used in training the teacher aides.

Individually, our thanks go to all the teacher aides, their cooperating teachers and principals, who helped us to complete the work on schedule.

Special mention goes to the local and regional representatives of the Department of Health, Education and Welfare, who encouraged us to persevere against unavoidable setbacks which occurred from time to time during the life of this Project.

To the un-named people who gave us help and assistance throughout, we offer our sincere appreciation.

Kathleen Barrett Marko
Project Director

New Bedford, Massachusetts
December, 1971

ABSTRACT

The effectiveness of pre-phonic training between kindergarten and first grade levels as a tool for acquiring reading skills was explored throughout the public school sytem in the city of New Bedford, Massachusetts.

A sample population of 260 kindergartners was identified as having potential learning difficulties by the results shown on the Slingerland,Mahon and Metropolitan Readiness Tests. This sample was randomly assigned to either Group I. experimental, or to Group II, control. The research design applied was the Campbell and Stanley number 6, posttest two group design.

Group I. received the Mahon System of assistance given by teacher aides trained by Dr. Mahon. Group II, received only the assistance based upon current reading materials used in the entire school system. Time allotment was half an hour a day for each group.

The results of the posttests confirmed the value of pre-phonic training where early diagnosis had identified potential learning difficulties. As a by product, the areas of early identification found to be most appropriate for individualized instruction were revealed.

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CHAPTER ONE
INTRODUCTION

The purpose of this investigation is to study the effectiveness of pre-phonic training between kindergarten and first grade levels in assisting children identified as having potential reading difficulties to overcome these difficulties. A side product is to determine the appropriate time to identify these weaknesses and to initiate prescriptive teaching.

Currently there is agreement among authorities in the field that reading failure is a growing educational problem. So it is interesting to note that this project was conceived originally by three professional educators, namely, Dr. Florence Mahon, Mr. George Nigro, and Kathleen Barrett Marko.

These educators work in curriculum development for public schools, administration of research for exceptional children and educational research and evaluation. Their combined efforts and interests were focused on beginning learning problems in reading, particularly as there is a noticeable lack of reported research in the areas covered by this investigation.

The procedure to be followed will be to identify all students with potential reading difficulties at first grade level. The elementary schools having such students will then be randomly assigned to either Group I to receive the Mahon System of assistance; or to Group II to receive no such assistance except that accorded by the teacher in the regular use of current reading materials:

a) All instruction for children identified as potential reading failures will be conducted by teacher aides.

b) In the "experimental" group the teacher aides will be trained by Dr. Mahon specifically.

c) In the "control" group the teacher aides will be trained by the classroom teachers in the use of texts currently in use by the entire school system. Specific experience will be provided. (The texts are selected from Lippincott, Houghton Mifflin and Singer Co. Basic Series.)

d) Time allotment will be half an hour a day for both groups.

The Mahon System is new in that it begins at a lower level of readiness. It is unique in that the presentation of instructional materials and techniques used are specifically designed for reaching the developmental level of slow learning children. It is also particularly helpful to bi-lingual children. It is innovative in that it is an original compilation of techniques and procedures, based upon the results of fifteen years of clinical practice, never previously adapted for use in a school system.

Addressing the problem of what methods and materials are effective in assisting students identified to have potential reading difficulties to overcome same, the following hypotheses were made:

1) Null Hypothesis (H_0): There is no difference in score totals of the Metropolitan, Houghton-Mifflin or Lippincott Tests, taken separately, between the two groups; that is, between O_1 and O_2.

2) Alternative Hypotheses (H_1): The score totals for Group I, the experimental group taught with the Mahon System of reading readiness, in the Metropolitan, Houghton-Mifflin or Lippincott Tests, taken separately, are greater than those for Group II, the control group using the other systems.

The t tests were one-tailed at the .05 level of significance.

Project PEEP confirmed the value of specific individualized assistance prescribed to pupils with identified weaknesses in reading skills. The Project also revealed which aspects of identification are most appropriate in early screening procedures. As a byproduct, the K.S. Test was refined as a diagnostic instrument.

The major objective is described, initially, as the purpose of this investigation.

Contributory objectives include the following:

a) Interdisciplinary acceptance of sponsorship

Introduction (continued)

by school board members.

b) Obtaining support services from the school system.

c) Use and training of teacher aides in the Mahon System. Also, their training in the administration and use of the Kindergarten Screening Test.

d) Collection of data from sample population located in twenty different schools. (Test data and relevant information amounted to 148 items for each of 260 children.)

e) Development of supplementary reading devices by the teacher aides under the supervision of Dr. Florence L. Mahon.

f) Dissemination of reports and information as needed.

g) Using computers to record and analyse data.

h) Maintaining time lines and scheduling as planned.

All objectives were attained successfully.

Introduction (continued)

Justification of Testing Auditory and Visual Discrimination at the Kindergarten Level.

A study of the results of the Kindergarten Test administered to 1,200 kindergarten children as related to its prognostic significance for reading success in the first grade revealed that auditory and visual discrimination were most significant.

Auditory Discrimination-
isolated sounds X^2 67.6 phi .46

Auditory Discrimination-
initial consonant X^2 112.4 phi .608

Visual Discrimination-
matching words X^2 101.6 phi .571

These results indicate that the methods, techniques and tests used in the New Bedford Public Schools should be replicated for the purpose of verifying earlier findings.

It is expected that if all children about to enter first grade are screened and helped in this manner, there would be a higher percentage of reading succeses at the elementary levels than without such techniques. The advantage of these procedures, if demonstrated to be as significant as in previous studies, is that a valid means of reducing the large percentage of reading failures could be provided. The need for careful and relevant research at this grade level is substantiated by many educators, as described in the following review of literature.

Introduction (continued)

Review of Literature

Early Identification and the Educational Problem

The literature suggest that tests given to youngsters when they are beginning school may be of some value in predicting achievement. At best, an individual test provides information concerning only a specific skill and, therefore, of only one aspect of a child's performance. Usually a variety of tests have been employed, with various skills measured, and differences in criteria used.

Katrina de Hirsch states, "testing should do more than simply pick out children who are not yet ready for first grade." Hopefully, then, such a battery would enable one to locate, by means of a total score, those children who would have more difficulty in learning, and to identify the particular area in which training would be helpful.

(de Hirsch)[9]

To prevent more serious learning problems from occurring, identification of the child with learning disabilities should be made as early as possible in his school career. When a teacher realizes a child is having learning problems, she can construct an appropriate instructional program for him that will use and develop his skills, experience and potential, while relieving some of the problems that arose from past failures in a conventional school program.

(Haring)[17]

Kindergarten youngsters are not subjected to the more formalized academic structure of the first graders, but they do receive a structured program emphasizing the socialization process, perceptual-motor activities, auditory and visual discrimination training, and rote memory training.

Introduction (continued)

These are all means of identifying learning disorders and disabilities. The child who fails to function as a group member for a number of reasons, of necessity, wants a good deal of individual attention and may be recognized as having a disability.

(Thomas)[42]

Public schools are the only facilities uniquely suited to offer core services for the majority of children with learning disabilities. These children are conservatively estimated to constitute 10% of the elementary-age population. Considering the sheer number of such children and the fact that they come from homes which cut across all levels of economic and cultural backgrounds, the public schools become the only logical agency to provide for their unique educational and social needs. The administrative framework of public school education is prepared by experience for both short and longrange planning in order to provide the necessary service for this large group of exceptional children.

(Edgington)[13]

The failing learner is no longer a statistic of minor significance- the percentage of failing students is increasing annually. In the final analysis, the issue is educational. This focus must be maintained by all disciplines that come upon the scene.

(Barach)[1]

In dealing with methods of overcoming the reversal tendency, it would be well to define some terms used in relation to the problem.

The first such term is "laterality". The growing infant uses both sides of his body in unison in gross movements, making no distinction

between left and right. In later development, through random movement and experimentation, the child establishes the ability to distinguish between the right and left sides of his body separately and simultaneously.

(Kephart)[23]

If for various reasons, laterality is not commensurate in maturation with other areas on the growth and development continuum, then there might be problems in learning in academic situations, as has been indicated by empirical, and experimental evidence.

Laterality is intimately related to the directionality construct. In our Western society, whether an individual is right-handed or left-handed, reading is accomplished from left to right. Disturbances in laterality often mean disfunction in directionality. For this reason the two areas are often approached clinically at the same time

(Savage)[37]

The neurologically handicapped child shows "soft" neurological signs. Among these are difficulties in visual perception and visual motor coordination, emotional lability, hyperkinesia and distractability. Posture, gait, self-image and body awareness are all signs that tell about the individual child.

(Slocum)[39]

Significant Variables

Many theorists, psychologists and specialists in education currently assume that mastery of perceptual-motor functions is necessary prior to acquisition of higher cognitive processes and hence, to scholastic achievement. An experimental

design allowing variation in perceptual-motor functioning and scholastic ability tested this assumption. Contrary to the tested assumption some subjects perform well in school despite perceptual-motor deficiencies. In addition, it is scholastic achievement rather than perceptual-motor achievement (assumed to be crucial to learning) which discriminated between our groups in terms of their reliance on perceptual-motor or conceptual means in specially designed learning tasks.

Both younger and older children can be found who show gross deficits in perceptual-motor abilities and who, despite these deficits, are able to function very well in school and who do reveal reliance on conceptual means in our experimental tasks.

(Biblace)[4]

Transfer of Training

One of the most important problems in the whole psychology of learning is that of transfer of training.

One of the most important variables determining whether transfer will be positive or negative is the degree of similarity of the stimuli and response in the two tasks.

In 1949, Osgood summarized the results of his experimentation in the transfer of training. His diagram of a transfer surface graphically depicts the importance of stimulus and response similarity.

(Morgan)[34]

Introduction (continued)

Transfer of Training

The acceptance of the concepts of educability of cognitive abilities is now so widespread that we tend to forget that a relatively few years ago there was a real need to demonstrate that psycholinguistic ability could be improved before getting on to the more important business of rejoining the remedial techniques. But the prolongation of this early type of research is regrettable and hopefully in the near future the efficacy of remediation will be judged by movement in such areas such as reading, writing and speaking.[2]

(Bateman)

CHAPTER 2: METHODS AND PROCEDURES

The research design used was the Campbell and Stanley Design 6*, that is, the posttest two-group design.

Group I.	R	X	O_1
Group II.	R		O_2

Times: 1, 2, 3, 4, 5, and 6.

The initial preparation for Project PEEP began at the end of the school year 1969-70. During this period the whole kindergarten population of the New Bedford Public School System were screened by the K.S.Test. (Kindergarten Screening Test known as the Mahon Test) A total of 1,200 children were screened out of which a sample population of 260 children were selected based upon the following criteria. Each child selected had failed five or more subtests of the K.S.Test.

Prior to administration of the tests, 25 teacher aides were trained in giving, correcting and interpreting these tests.

For the purpose of this study the schools were divided by random selection into either Group I or Group II. Group I is known as the Experimental Group to receive the Mahon system of training. Group II is the Control Group which received the same hours of training but given solely from the reading system currently in use in the school building. The teacher aides had been assigned to their school prior to this study and all remained in their original positions.

* Campbell, Donald T., and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research, Rand McNally & Co., Chicago, 1963.

Methods and Procedures (continued)

The procedures for both groups in the research (sample) population followed the same pattern. The figures indicate the Time Line followed.

Figure 1. Identification of potential reading failures among total kindergarten pupils in the New Bedford Public School System. (C is Control and E is Experimental for pupils who failed five or more subtests in the K.S. Test, the Mahon Test)

Figure 2. Total potential failures identified by Slingerland and Mahon Tests.

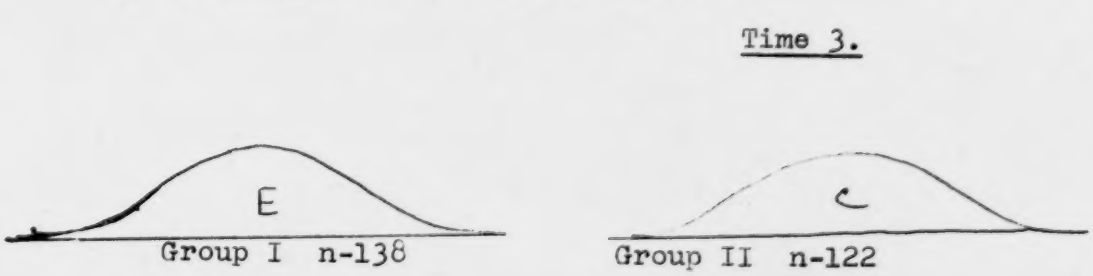

Figure 3. Identification of subpopulation by random assignment into either Group I, Experimental, or Group II, Control.

Methods and Procedures (continued)

At this time all individualized instruction was administered by the teacher aides. The Control Group received Lippincott or other systems favored by the individual school. The Experimental Group received instruction in the Mahon System exclusively.

Time 4.

Figure 4. Students receiving assistance.
Mahon System with teacher aides and Dr. Mahon.
Lippincott et al. systems with teacher aides and classroom teacher.

Three sets of achievement tests were administered, scored and recorded for each pupil in the Experimental and Control groups. These tests were labeled as the Metropolitan (Met), Houghton Mifflin (HM), and Lippincott (Lip). The last test, the Lip, was further broken down into Lip A Form and Lip B Form with Lip T used to identify the totals of Lip A and Lip B into one final total.

Time 5.

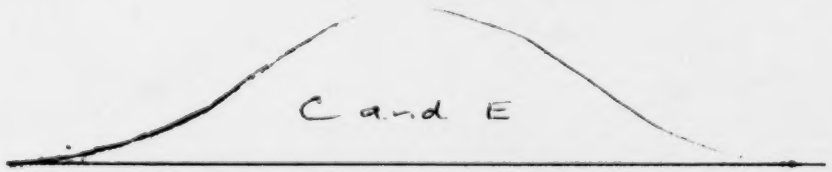

Figure 5. All students tested as described above, except those transferred out of program.

Time 6.

At Time 6 (beginning April 15, 1971) raw data of all the tests, that is, the Mahon, Slingerland, Met, HM, and Lip, were codified for computer and statistical analysis. The computer analysis yielded output of correlation matrices for further analysis in support or non-support of the Mahon Test. The statistical analysis was performed by hand to yield t tests.

The total sample population initially identified as having potential reading difficulties was 260, of which ten were eliminated from the final analysis because of incomplete data. The reasons for incomplete data came from many sources; some had moved out of the area, some did not complete the learning phase for reasons of illness or transfer. Seven other students had one set of t test scores missing; this information was approximated by using the model score of the particular schools attended by these students.

At the end of Time 6 (approximately the end of June, 1971) Group I, Experimental, had an n of 134 and Group II had an n of 116, with a total of 250 students completing this experimental phase.

The results of this analysis will be presented in chart form on the following pages.

TABLE 1. Diagram for Correlations of Subtests of the Mahon Test with Subtests and Total Scores of the Slingerland, Metropolitan, and Houghton Mifflin Tests.

MAHON TEST[a]

TEST	One column for each subtest measured no total M[b]	S.D.[b]
Slingerland Test subtests and total scores listed	r, M, S.D. expected to have no difference between Groups 1 and 2; validity coefficients.	
Metropolitan Test subtests and total scores listed	r, M, S.D. expected to be different between Groups 1 and 2, lower for Group 1 r but higher for Group 1 M.	
Houghton Mifflin Test subtests and total scores listed	r, M, S.D. expected to be different between Groups 1 and 2, lower for Group 1 r but higher for Group 1 M.	
M[c]	M and S.D. expected to have no difference between Groups 1 and 2; but both group r's less than school M.	
S.D.[c]		

a--Separate table for Groups 1 and 2.
b--M and S.D. for Slingerland, Metropolitan, and Houghton Mifflin Tests.
c--M and S.D. for Mahon Test subtests; none available for total test.
Other-- Mahon Test subtests M and S.D. will be available for comparison to those of Groups 1 and 2.

Methods and Procedures (continued)

All data was first recorded on pencilled worksheets using 80 sectioned computer pads. These worksheets were filled according to our key code (on file but not included).

Finally all data was coded and run through the computer from which our final tables are obtained. This data is filed at Boston College Computer Center.

The correlation matrices refer to the tests listed in Table 1, with the addition of the Lippincott Forms A and B.

a) The Mahon Test Intra Item Correlation matrix (21 x 21) focuses toward finding independent measurements and hence independent variables; correlations to approximate zero.

b) The Mahon Test and the Slingerland Test matrix should show about the same correlation for both groups. These correlations can be considered validity coefficients; since the Slingerland Test is normally used to identify children with potential reading difficulties.

c) Achievement Tests were given at the end of the experiment. The Mahon Test with the Metropolitan Test, Form A. This correlation is expected to be different between groups I and II, with Group I lower, if t test indicates significant difference.

d) The Mahon Test with the Houghton Mifflin correlations should follow pattern indicated in c) above.

e) The Mahon Test with the Lippincott Tests, Forms A and B, taken separately should also follow the pattern of both c) and d) above.

One small departure from the original research plan was carried out, that is, the Lippincott, TestB. Form, was given as well as the tests listed in the proposal. This was done in order to obtain pupil progress findings at more advanced stages than previously anticipated. This B. Form includes a test of long vowel mastery as applied in decoding and reading skills. This is not included in the A. Form of the same test, or at the same level of attainment in the other tests given.

TEST MATERIALS

Screening Phase:

1. Slingerland, Beth H., Tests: Pre-Reading Procedures, Educators Publishing Service, Inc., 75 Moulton Street, Cambridge, Mass. 02138, 1968; also, Teacher's Manual; referred to as the Slingerland Test.
2. Mahon, Florence L., Kindergarten Screening Test, New Bedford Public Schools, New Bedford, Mass. 02740, 1969; also, Teacher's Booklet; referred to as the Mahon Test.

Learning Phase:

1. Mahon, Florence L., Little Listening Boy Visits the Village where Everyone Can Read, pub. Reynolds DeWalt, Industrial Park, New Bedford, Mass., 1965, and Work Text; plus supplementary leaflets; referred to as the Mahon System.

Posttest Phase:

1. Hildreth, Gertrude H., Nellie L. Griffiths, and Mary E. Gauvrain, Form A: Metropolitan Readiness Tests, Harcourt, Brace and World, Inc., New York, 1965; also, Manual of Directions; referred to as the Metropolitan Test.
2. McKee, Paul, M. Lucille Harrison, and James B. Stroud, Part Two - Diagnostic Test: A Pre-Reading Inventory of Skills Basic to Beginning Reading, Houghton Mifflin Co., Boston, 1962; also, Teacher's Manual; referred to as the Houghton Mifflin Test.
3. McCracken, Glenn, Charles C,Walcutt and Mary F.Bond. Book A and B Achieve-Tests for Lippincott's Basic Reading. Lippincott and Company,N.Y; referred to as the Lip A and Lip B Tests.

CHAPTER 3; RESULTS OF THE EXPERIMENT

The total subpopulation completing the learning phase was 250. From the original number of students identified (264) as having potential learning difficulties, 260 entered the experiment. Others , numbering 10, were eliminated from the final computations for reasons of incomplete data. The information given for incomplete data was that some had trasfered out of the school, others had moved out of the area and the rest had missed days through illness and were unable to complete the period of instruction.

Seven additional students had no data for one set of test scores; information was approximated by using the modal score of the particular schools attended by these students. At termination of the project Group I, had an $\underline{n}$ of 134 and Group II, had an $\underline{n}$ of 116, making a total of 250 finishing the experiment.

TABLE II

ACHIEVEMENT TEST RESULTS: MEANS AND STANDARD DEVIATIONS OF GROUPS I AND II IN READING ACHIEVEMENT TESTS

Group	N	Statistic	Met.	H.M.	Lipp A.	Lipp B.	Lipp T.
E (I)	134	Mean	71.56	19.23	54.27	50.13	104.40
		S.D.	11.57	2.63	11.66	13.03	23.36
C (II)	116	Mean	72.11	19.06	54.67	46.70	101.37
		S.D.	9.94	2.75	10.56	12.09	21.13

Test abbreviations: Metropolitan-Met.;Houghton Mifflin-H.M.; Lippincott- Lipp or Lip(Forms A & B and Total score).

TABLE III

MEANS AND STANDARD DEVIATIONS OF SCHOOLS
IN READING ACHIEVEMENT TESTS

SCHOOLS			MET. TESTS		H.M.	
Number	Name	Group	Mean	S.D.	Mean	S.D.
01	J. Swift	1	79.50	4.95	22.00	0.00
02	A. Lincoln	1	75.54	10.78	19.36	2.57
03	J.A. Parker	1	67.32	9.33	18.55	2.34
04	Mt. Pleasant	1	76.31	10.48	18.08	4.09
05	Congdon	1	71.82	7.47	18.18	2.60
06	Kempton	1	73.19	7.64	19.13	2.87
07	Carney	1	74.08	11.37	20.75	1.29
08	T. Rodman	1	66.64	10.04	21.09	1.04
09	E. Hathaway	1	75.93	7.72	20.67	1.18
10	E.C. Brooks	1	67.00	6.96	18.00	2.97
11	Clark St.	1	76.00	8.37	17.50	2.07
12	Dunbar	2	71.60	7.57	18.40	3.78
13	Winslow	2	67.17	5.27	20.00	1.10
14	Knowlton	2	73.00	9.81	19.43	2.85
15	Phillips Ave.	2	81.63	6.78	20.13	2.30
16	Taylor	2	74.17	9.55	19.33	2.07
17	Campbell	2	77.43	8.41	19.71	1.27
18	C. Ashley	2	66.63	8.05	18.11	2.67
19	S. Ottiwell	2	70.78	12.54	19.61	2.03
20	Clifford	2	67.39	8.66	17.39	3.36

TABLE IV

THE MEAN AND STANDARD DEVIATION FOR THE LIPPINCOTT TEST A AND B FORMS TOTAL, ALSO NUMBER OF PUPILS IN THE EXPERIMENT FROM EACH SCHOOL, AND SCHOOL

SCHOOLS		TESTS		
Number	Group	Mean	Lipp. T. S.D.	N.
01	1	134.00	2.83	2
02	1	104.09	27.55	11
03	1	90.64	21.70	31
04	1	92.38	23.14	13
05	1	103.45	13.65	11
06	1	108.38	22.08	16
07	1	113.17	18.16	12
08	1	128.55	9.23	11
09	1	120.06	12.14	15
10	1	107.50	22.33	6
11	1	81.33	17.90	6
12	2	107.30	16.97	10
13	2	109.17	13.18	6
14	2	88.07	26.33	28
15	2	112.63	19.26	8
16	2	110.17	11.02	6
17	2	111.14	18.01	14
18	2	102.00	11.20	8
19	2	101.61	18.14	18
20	2	98.78	19.03	18

TABLE V

STATISTICAL TEST RESULTS;
SUMMARY OF t TESTS OF DIFFERENCE BETWEEN MEANS
OF GROUPS IN READING ACHIEVEMENT TESTS

MET.	H.M.	LIP A	LIP B	LIP T.	N.
-.4027	.5015	.2850	2.143*	1.0663	250

* Significant at the .05 level at 248 degrees of freedom with a one-tailed test; all others not significant.

From Table 4, all t statistics but for the MET are positive indicating a slightly better achievement for Group I, but only for the Lip B Test was the t statistic significant. There appeared to be a decrement for Group I in the MET; that is, Group II scored better, but again the two groups cannot be considered different in achievement regardless of the fact that due to the randomization process, there were more pupils with greater reading difficulties in the experimental group.

Clearly the Mahon System does make a difference in reading readiness as measured by the Lippincott B Test. But, apparently all standardized methods of reading readiness prepare equally for standardized achievement tests in beginning reading. The correlation matrix between the Mahon Test and the Lip B Test should, therefore, reveal some kind of amplifying information as to why the t test for the Lip B was significant.

TABLE VI

A COMPOSITE OF CORRELATION COEFFICIENTS
AMONG READING ACHIEVEMENT TESTS FOR GROUPS I AND II*

C(II)	E(I)	MET	H.M.	LIP A	LIP B	LIP T
MET			.2659	.3739	.2280	.3139
H.M.		.4704		.5978	.5982	.6323
LIP A		.5500	.5591		.7883	.9392
LIP B		.5097	.5216	.7400		.9516
LIP T		.5664	.5777	.9230	.9419	

*All r's are significantly different from zero at the .05 level.

Note that correlations for Group I, read at the upper right hand portion of the matrix, are in many cases much lower than those corresponding for Group II, in lower left hand corner of matrix. This was expected by implication in the original design.

It seems that over a period of time that the Mahon System prepared Group I differently than Group II, although advancing them in the final test.

The experimental and control groups achieved equally well by the Mahon System, as measured by the following tests at the end of the instruction time as did those instructed in other methods or systems of reading preparation. The tests referred to are:

a) Metropolitan, Form A
b) Houghton-Mifflin
c) Lippincott, Forms A and B

However, in the Lippincott Test B, the students taking the Mahon Test did significantly better; that is, the t test of difference between means with 248 degrees of freedom with a one-tailed test was significant at the .05 level (t equal to 2.143).

Table VII

Significant Test-Subtest Correlations (r 05) Between Mahon Test and Lippincott Tests A and B for Group I. E(1) N= 134 r 05 > .168

MAHON TEST

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
Test A	1			7596																			7.5896	1.781
	2	1986			2017				1790						1736								7.7612	1.466
	3			2396	7557		1809		1903	2081													6.8284	1.643
	4			3186	3469					2011													5.0896	2.020
	5	1808		2315	2325				2945														4.7015	1.476
	6	1816			3740																		3.7537	1.453
	7	2144			3704				1835														3.5657	1.555
	8			2157	3080			1855	1835							1824	1821						5.6493	1.808
Lippin-cott	9			2186	2344																		4.4254	1.294
	10			1953	3220				2152	1681		1878					2003						5.0448	1.763
Total		2100		2714	3898				2269								1971						54.8656	11.664
	1			2084	3028																		5.5896	.927
	2	2305		2507	4294											1715							7.5821	1.839
	3	1731			2365	2182																	14.6045	3.975
	4	1787		2275	4016				2090														10.1866	3.358
	5	2126																				1769	1.9030	1.297
	6	1973			3349	1731										1940			1934	2145			1.2339	1.358
	7	2933		2456	2682				1890														3.2687	1.856
	8			2215	1598																1793		2.6269	1.352
	9				2018											1956							3.5920	1.575
Total		2362		2274	3982	1929			1988														50.1269	13.834
Gr. Total		2367		2724	4168				2342								1801							29.359

Decimal points precede values
r 05 for Experimental Group -.1680
r 05 for Control Group -.1820

Table VIII

Significant Test-Subtest Correlations (r 05) Between Mahon Test and Lippincott Tests A and B for Group II. C (2) N = 116 r 05 > .182

MAHON TEST

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
Test A	1							2203												2318			7.7241	
	2																		2732		2676		7.4052	1.2987
	3														2515	1953				2204			6.8621	1.5317
	4	1938				2043							1946	2460	3075				2565				5.0948	2.0514
	5													2089					3343			1963	5.0451	1.1374
	6		2247		2636											2039			3027	2078			3.6207	1.9605
	7		2446			2559									2283	3210	2468						3.9310	1.5364
	8		3428			2880									2046	2144			2551				5.6121	1.7632
	9	1835																	3274				4.2759	1.7412
Lippincott	10	1849													1940	1935	2608						5.0948	1.6732
Total		2028				2491									2095	2560	2501		3168				54.6724	10.5564
Test B	1			2149	2679											2048							5.7155	.6828
	2					1960									2852	2958	1886						7.1466	1.6326
	3														1827	2503	1958						12.9052	4.5339
	4	2265	2348		1846	1840		2375							2895	2670		2638	2195				9.9397	2.9467
	5	1847	2131			2124				3124						2627							1.4052	1.1419
	6	2175			2527										2604		1843		2668				.7586	1.0010
	7	2047	2030		1839										3196	2489	2572	2060					2.8793	1.6948
	8		2732			2713										2051							2.7414	1.4514
	9		2175			1987										3583	3349						3.0259	1.7218
Total			2609		2001	2342									2781	3412	2676	1990					46.6983	12.0911
	M																							

Decimal points precede values

Table IX

E (1) N = 116 C(2) N=134

Significant Interitem Correlations (r 05) of Mahon Test for Groups 1 and 2

MAHON TEST

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
1				1952							2175						2458					3134	4656
2	2028																					5149	5016
3				2817		2413										1779						6269	4854
4			4795					2115														5224	5014
5		331												1785								3881	4891
6											2108						2009					6493	4790
7				2510												2303						1716	3785
8						2779		2831														7239	4487
9				2282	1624	2070		5500			1759					1956						5522	4991
10			2875	2643					2483		3326										2128	4925	5018
12	1887	3939											1678									3433	4766
11						2020		2692	3604	4196			1823									3955	4908
13														1897								3731	4854
14													3201				1755					2836	4524
15											1893			3064		2527						3433	4766
16														2465	3699							2239	4184
17							2052															3657	4834
18				1888			1978												5538	5749		4925	5018
19										1974	1965							3920		5706	5279	4478	4991
20																1856	4695	3326			7595	6269	4854
21																2205	4835	3539	6481			6343	4834
M	4052	3707	5862	4052	4483	8362	3448	7069	5437	3966	3793	3190	3621	2845	3191	1379	4397	5086	6034	4655	7411		.168
SD	4930	4851	4946	4931	4995	3717	4774	4572	5003	4913	4873	4687	4827	4531	4681	3463	4985	5621	4973	5010	4398	.182	r 05

Table XI

Significant Test-Subtest Correlations (r 05) Between Mahon Test and Metropolitan Test for Groups 1 and 2

Group I E(1) n = 134 r 05 ≥.168

		MAHON TEST																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
METROPOL-ITAN TEST GROUP I	1	1724			1816						3395													
	2				1892				1941										2366			3027	9.0373	2.7568
	3				1874				2662								2002						10.5672	2.2426
	4			1778																			10.9701	2.0073
	5	1699	2197	2111		1842			2732			2342											15.0672	1.6867
	6	3042						2300	2021									1675	1677				16.7463	3.1039
	7																						8.5224	2.7631
Total		2514							2465			1968							2444				1.3731	.9937
M																							71.5517	11.4665
SD																								

Group 2 C(2) n = 116 r 05 ≥.182

	1	3121		2206		2630		2172						3638										
	2	2315	1899		1827	2515																	8.9914	3.0744
	3				2257			1971				1841	2221		3214				2651				10.6293	2.6150
METROPOL-ITAN TEST	4																		3142	2265			10.7845	2.2758
	5	2101			2195			3033					1945										15.3966	1.2363
Group	6								2787	2080			2089		2568				2418				15.9655	3.7461
II	7	1957																					9.0776	2.4322
Total		3013		2267		2894								3714					3130	1816				1.0650
M													2272										72.1121	9.9352
SD																								

Little noteworthy or different between the two groups.
Decimal point precedes values. r 05 for Experimental Group- .1680. r 05 for Control Group- .1820.

Table (XI)

Significant Test-Subtest Correlations (r 05) Between Mahon Test and Slingerland Test for Groups I and II

Group I E(1) n = 134 r 05 >.168

MAHON TEST

SLINGERLAND TEST Group I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
1								1771					2517									4.5672	3.1803
2								1677					1958									4.9179	3.0927
3											1840											5.4925	2.9880
4					2388		1904	1871			2710					2117						3.0597	1.6303
5	1131						2959				2030						1911					3.1940	2.3185
6	1863		1729					1827														5.7313	1.9318
7			3164	4549	3224		6493	2907														12.5970	3.4687
M	3134	5749	6769		3881	1716		7239		4925	3433		7836		2239		4925		6269				
							5532		3955			3731		3433		3657		4978		6343			
SD	4656	5016	4854	5014	4891		4790	4487		5018	4766		4524		4184		5018		4854				
							3785		4991			4908		4834		4766		4834		4991	4834		

Group II C(2) n = 116 r 05 >.182

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
1		1904																3341				4.6034	1.4737
2																						5.2414	5.8749
3						1878					2203									2049		5.0431	2.3271
4							1975						2486	1875								3.3017	1.4698
5						2867						2396		3130								3.6379	2.25721
6																						5.4052	2.1749
7	3484		2338	2096									2640									12.3879	3.4307
M	4052		5862		4483		3448		5431		3793		3621		3190		5086		4655		7414		
		3707		4052		8362		7064		3966		3190		2845		1379		4397		6034			
SD	4931		4946		4995		4774		5003		4873		4827		4681		5021		5010		4398		
		4851		4931		3717		4572		4913		4681		4531		3463		4985		4913			

Decimal points precede values. r 05 for Exp. Group- .1680. r 05 for Cont. Group - .1820. Conclusions are that the items for both groups I and II correlate Mahon-3, Slingerland-7; Mahon -4, Slingerland-7; Mahon-7, Sl.-5; Mahon 8, Sl.-4. Most of others -0, though some are significant. Generally the Mahon Test measures different characteristics then the Slingerland Test. While only 4 r"s yield validity coefficients. if Slingerland is to be considered standard.

Table XII.

Significant Test-Subtest Correlations (r 05) Between Mahon Test and Houghton-Mifflin Test for Groups I and II

Group I E(1) n = 134 r 05 ⩾.168
MAHON TEST

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	M	SD
HOUGHTON MIFF- 1	2471																					10.9627	1.8654
LIN TEST 2	1892		3232	1818																		8.2689	1.1708
Group I Total	2593		2269					1754														19.2413	2.6337
M																							
SD																							

Group II C(2) n = 116 r 05 ⩾.182

HOUGHTON MIFF- 1					232	2092		1981										3043				10.8879	1.9326
LIN TEST 2	1913			2762																		8.1724	1.1889
Total	1872			2655	2787									2794								19.0603	2.7482
Group II M				3091	2892								1866	2095				2661					
SD																							

Nothing noteworthy or different between the two groups

Decimal points precede values
r 05 for Experimental Group- .16
r 05 for Control Group -.1820

The correlations between the Mahon Test subtests and the Lippincott B Test subtests were checked and the following information found (see Tables VII and VIII).

a) The number of significant correlations for the experimental group, which totaled 31, was much less than that for the control group, which totaled 43, at the .05 level of significance.

b) Of the 43 control groups significant correlations and the 31 experimental group significant correlations, the two groups had 12 significant correlations in common. The number of significant correlations not found in the experimental group but found in the control group was 15, whereas the significant number of correlations not found in the control group but found in the experimental group was 19.

CHAPTER 4: CONCLUSIONS

The conclusions from the t tests are that

a) Group I, the experimental group with the Mahon System of reading readiness, achieved significantly better than Group II in the Lip B Test
b) Groups I and II achieved equally well in all other tests.

The results of this study have shown that it is possible to accelerate young children in acquisition of reading skills without causing emotional problems.

It is possible to introduce the long-vowel along with the short vowel without causing confusion in the young learner.

Without taking the I.Q. into account, all children (in the project) regardless of initial learning problems were able to achieve equally well in showing progress in areas of deficiency. In the Lippincott B Test all children who had received instruction in the Mahon System of preparation for reading, that is, the experimental group, demonstrated greater achievement than the control group.

The Kindergarten Screening Test provides excellent diagnostic potential in the areas of:

1) Verbal fluency
2) Matching words
3) Discrimination of letter sounds
4) Discrimination of words identified by sound or initial consonant.

It may be inferred, then, that the Mahon System presents and prepares the student better in the following areas:

1) Verbal fluency
2) Matching designs
3) Matching words
4) Discrimination of letter sounds
5) Discrimination of words identified by sound or initial consonant.

These areas, among others, as found in the Mahon Test, are reflected in the Mahon System. Evidently this system does a good job for students especially in the areas of visual and auditory discrimination.

The systematic effects of the Mahon System prepares the experimental group better for the Lip B Test than the other systems used for the control group. This is demonstrated by the fact that the students in the experimental group did equally well in achievement, as measured by the Lip B Test, regardless of any possible ordering of students from high to low before instruction. (Two factors which were not studied were the ranking of students according to their I.Q. score and by their subtest score, that is, did they fail five or anywhere from five to twenty subtests in the Mahon Test.

As a direct outcome of the study, the Mahon Test has been revised. In its new form it can be easily understood by paraprofessionals for diagnostic purposes.

Other outcomes are:

a) Teacher aides have proved capable of carrying out specific teaching responsibilities. (This capability should be studied for its contribution in aiding progress in the early grades.

b) In teaching reading readiness it is possible to introduce the long vowel at the same time as the short vowel, without deleterious effects. (This is established by the results of the Lip B Test.)

c) A precedent has been established for more intensive training being appropriate for the young school child.

d) All the objectives of the study were met, regardless of interim administrative changes due to circumstances beyond control.

e) This study also pointed up the value of having principals with expertise in differing fields work together for the benefit of improving early childhood education.

CHAPTER 5: RECOMMENDATIONS

1. A study of the results of this experiment indicate that pre-phonic training is highly effective when administered to children between kindergarten and first grade levels. It is , therefore, proposed that several replications of this treatment be made in order to test whether the same progress is obtained for other children from various economic and geographic areas.

2. The t test of difference ,shown in Table V, clearly indicates the advances made by the experimental group in learning the "long vowels" at the same time as the short vowels.This method of instruction verifies the assumption that it is both possible and practical to introduce the long vowel at an earlier stage than usual. This method of instruction may be introduced in other systems.

3. Evidence substantiates that the skills necessary for good reading,which are sometimes found lacking with the beginner, may be enhanced by early diagnosis followed by appropriate individualized instruction.This procedure is advocated where there are any potential learning problems.

4. In general, and because of the administrative limitations experienced during this project, it is believed that this experiment could be beneficially replicated with the following modifications; a) The teacher aides should be trained in instruction of System prior to teaching time; b) Post-testing should be given earlier in the school year to ascertain amount of accelerated learning by the experimental group;c)a longitudinal plan should be incorporated with the research design.

5. Because of the growing need to prevent the large numbers of school reading failures,it is advocated that a closer look be given to the advantages of early pre-phonic training.

6. This early start into the mechanics of reading does not confuse or develop emotional problems among the children receiving instruction.

7. It is suggested that this System be tried with a homogeneous group of bi-lingual children with similar correlations being made. This would test the possibilities of introducing the mechanics of reading without developing a language barrier. It is believed that the young child is more flexible at this stage of his development to receive this instruction.

KBM

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APPENDIX

KINDERGARTEN SCREENING TEST

New Bedford, Massachusetts

Page 1 P

I. IDENTIFICATION

* 1. Child's Name _____ School _____

2. Chronological Age:

	Year	Month	Day
Date of screening test	____	____	____
Date of birth	____	____	____
* Chronological Age	____	____	____

3. Pre-school Status:
* Did this child attend Pre-School cla sses? (check) ____ Yes ____ No

4. Bi-lingulism in the Home:
Is a language other than English spoken
* in the home? (check) ____ Yes ____ No

5. Non-English:
Has this child been in this country for
* less than one year? (check) ____ Yes ____ No

II. COGNITIVE FUNCTIONS

1. Deviation Intelligence Quotient (DIQ)
Lorge Thorndike Intelligence Test Level 1
Administered May, 1969

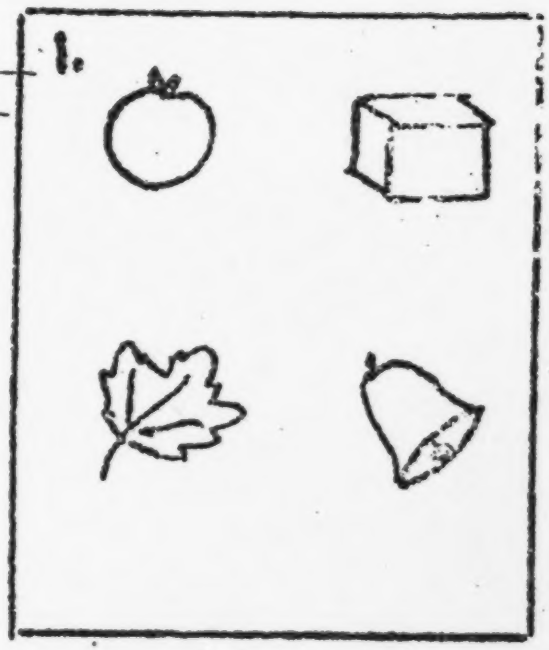
* Vocabulary _____
* Differences _____ (record)
* Similarities _____

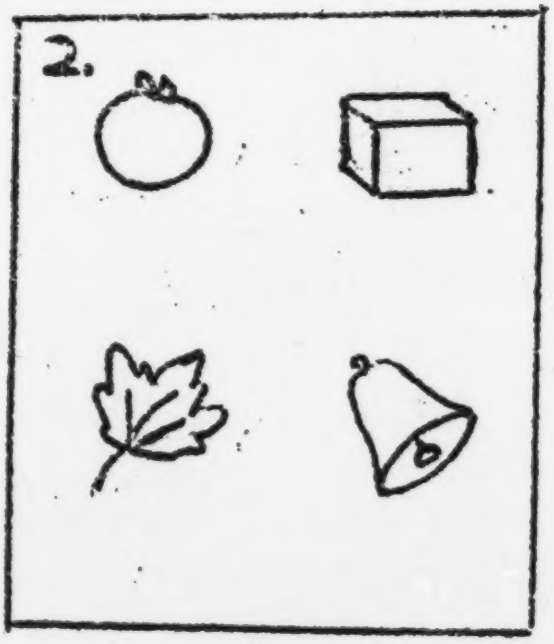
* DIQ _____

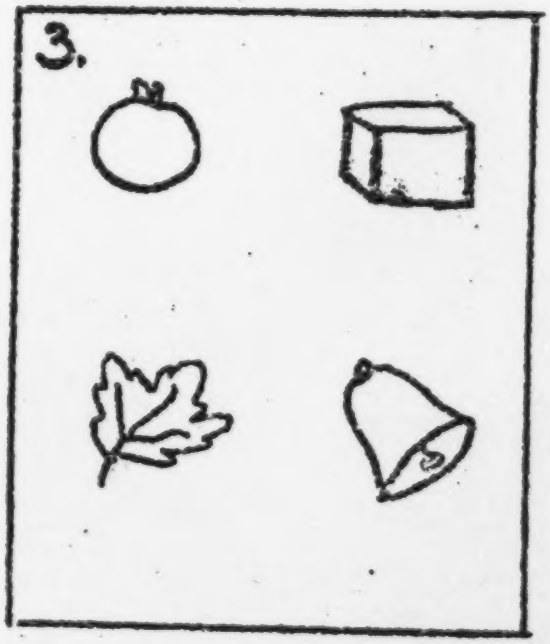
2. Verbal Fluency:
Can this child tell a story with good
* content and verbal fluency? ____ Yes ____ No

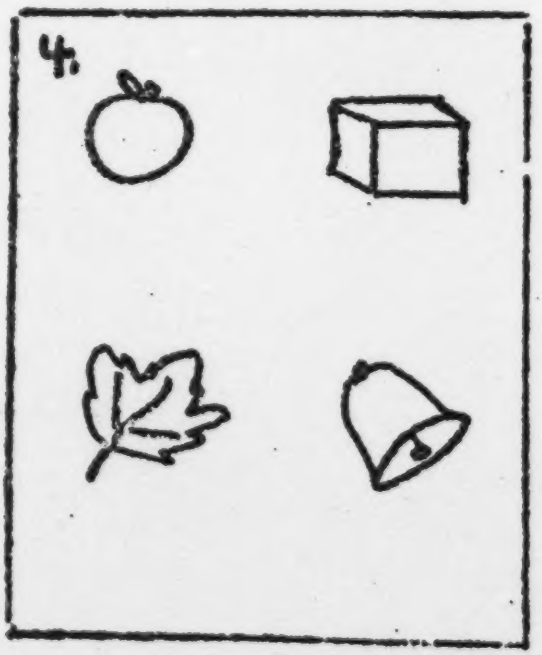
\+ or -

Page 3 2 (2)







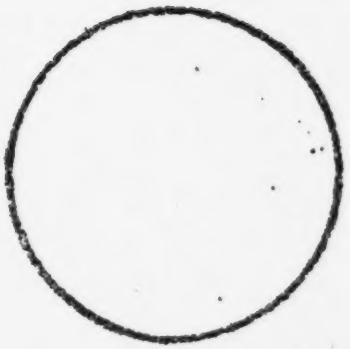


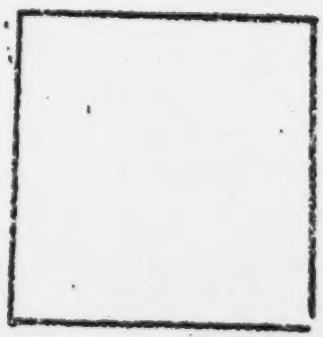
SCORE ____

+ or -

KINDERGARTEN SCREENING TEST

Page 4 P





(Partial)

SCORE _____

Note: Refer to this page for partial assessment of Hand Motor Coordination (III-5) + or -

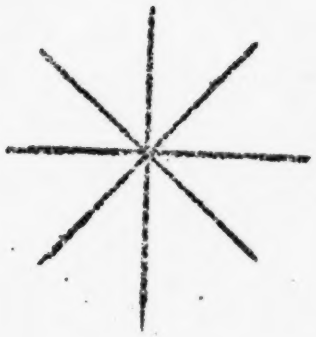
KINETMARTY SCREENING TEST

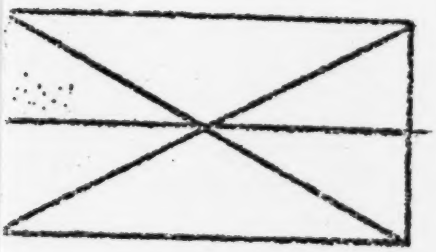
Page IV

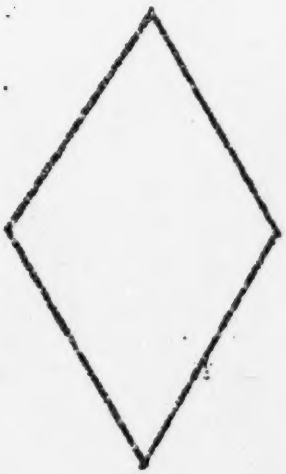
47

SCORE (Final) ____ of ____.

Note: Refer to this page for partial assessment of Hand Motor Coordination (III- 5)







score( )

n S 9

b F p

3 8 K

SCORE ____ + or -

49

Note: Refer to this page for partial assessment of Hand Motor Coordination (XII- 4 and XII - 5)

Baby cries.

Fix the Kite.

A girl jumped

Note: Refer to this page for partial assessment of Hand Motor Coordination (III-4 and III- 5)

SCORE ____
+ or -

III. VISUAL-MOTOR COORDINATION (continued)

4. Reversals of Letters or Numerals:

a. The teacher will indicate whether reversals are noticeably absent in the writing of the child in every-day work. _____ Yes _____ No

b. The test administrator will note whether there are less than four reversals in the writing of name, numerals, letters or words in this screening test. (Survey Pages : 2 P; 3 P; 7 P (1) and 7 P (2)). _____ Yes _____ No.

SCORING: ARE BOTH ANSWERS TO THE ABOVE YES?

_____ Yes _____ No
\+ or -

5. Eye-Hand Coordination:

a. The teacher will indicate whether the child performs with eye-hand coordination appropriate for his age level by answering the following questions:

Does the child hold the pencil or crayon correctly and comfortably? _____ Yes _____ No

Does the child color designs reasonably well within the lines? _____ Yes _____ No

b. The test administrator will assess the eye-hand coordination of the child by referring to following pages of this test: 2 P; 3 P; 4 P; 5 P; 6 P; 7 P (1); 7 P (2); 14 P.

Are the lines executed with firm strokes without wavering to a noticeable degree? Are closures without gaps or overlapping? _____ Yes _____ No

SCORING: ALL ANSWERS TO THE QUESTIONS ABOVE MUST BE YES FOR A SCORE OF "PLUS".

_____ Yes _____ No
\+ or -

IV. BODY COORDINATION

1. The teacher will answer the following questions:

Does the child:

a. Skip on both feet? _____ Yes _____ No

b. Hop on one foot? _____ Yes _____ No

c. Balance standing on one leg? _____ Yes _____ No

d. Throw a ball at a target? _____ Yes _____ No

e. Perform activities with relative ease and lack of awkwardness? _____ Yes _____ No

f. Walk with normal posture and rhythm? _____ Yes _____ No

g. Articulate with speech consistent with age? _____ Yes _____ No

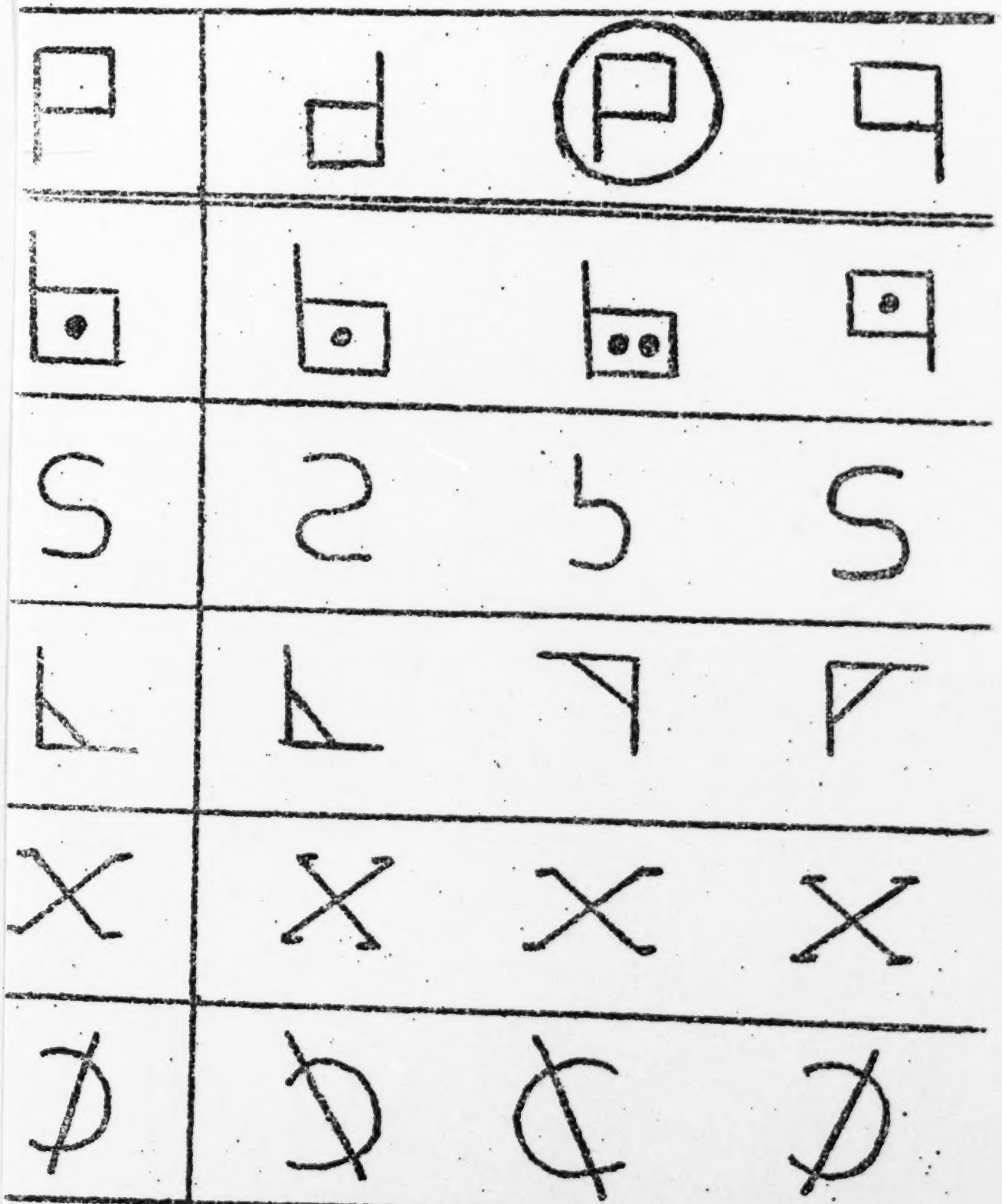
h. Have normal vision? _____ Yes _____ No

i. Have normal hearing? _____ Yes _____ No

SCORING: ALL ANSWERS (a. through i.) MUST BE RECORDED AS "YES" TO BE SCORED WITH A FINAL " PLUS". WHEN THE SCORE IS "MINUS" INDICATE THE LETTER (a. through i.) OF THE ITEM FAILED.

_____ Yes _____ No

\+ or Letter



is	(is)	si	sl
but	tub	bat	but
jug	jug	jig	gig
bib	did	bid	bik
nade	dame	made	mod
drinK	Krind	drinK	dirn

m	n	s
d	b	t
l	h	c
w	f	v
c	th	t
ch	z	sh
wh	h	w
z	g	j

SCORE ___

+ or -

nan boy car

can hat pig

tup won dog

not hen run

zip jig rod

sun chin can

that what fun

pat dot bog

SCORE ___

56

+ or -

KINDERGARTEN SCREENING TEST

Page 15 P

VII. PERSONALITY AND BEHAVIOR

2. Social- Emotional Characteristics:

The teacher will complete the following:
A "Yes" answer is scored with a "plus".
A "No" answer is scored by using the code letter(s) as indicated on Page 15 T.

a. Does the child willingly accept separation from his parent(s) or other person upon whom he depends? _____ Yes _____ No

b. Is the child generally independent in accepting responsibility for his own welfare up to his age level expectancy? _____ Yes _____ No

c. Does the child participate in the classroom activity without making excessive demands for attention? _____ Yes _____ No

d. Does the child participate with the group, not being withdrawn? _____ Yes _____ No

e. Is the child generally alert? _____ Yes _____ No

f. Does the child willingly wait for what he wants and is his frustration tolerance fairly high? _____ Yes _____ No

g. Does the child conform to classroom activity without excessive agression? _____ Yes _____ No

h. Does the child complete required activity within the specified time? _____ Yes _____ No

i. In general does the child have good attention span and concentration consistent with his age level? _____ Yes _____ No

SCORING: ON THE PROFILE CHART, RECORD A "PLUS" IF ALL ANSWERS ARE "YES". FOR A "NO" WRITE IN THE CODE LETTERS ON THE PROFILE. _____ Yes _____ No

* + or Letters

THE USE OF MATERIALS IN THE MAHON APPROACH TO READING

A. This approach to reading begins at a level based upon the assumption that the child needs assistance to master the skill at every new step in the learning process.

B. Original techniques for the teacher are presented to assist the child over each new hurdle represented by minute steps in cognitive, auditory, visual and associational development.

C. The composition of the word is developed from the basic C-V-C concept (consonant-vowel-consonant) with the vowel as a pivot. The development is in strict left-to-right sequence so that the slow child is not confused by skipping from one component to the next.

The material in the instructional packet is used in the following manner:

1. Charts adapted from the Little Listening Boy Books consisting a. illustration b. mouth set c. printed letter needed to assist child with skills developed in steps.

a. Recognition of auditory stimulus - the sound of the letter

(This is accomplished by giving the sound a name such as, "the puffing sound." The slow child is helped in identifying a sound in this way.)

b. Recognition of the visual stimulus- the configuration of the letter.

(The letter on the chart is superimposed on a familiar object or part of the body. The slow child needs an order to recognize a configuration.)

c. Association of sound of letter with the visual form of the letter.

(The letter form is superimposed upon the picture that suggest the speech in isolation. The slow child needs to hear the sound in isolation before it is blended with other sounds in the word.)

d. Auditory discrimination of the beginning sound in words.

(The illustration of mouth position is placed under the picture on the chart as a visual avenue for helping the slow child in auditory discrimination of beginning consonant sounds. Thus the child can compare the visible mouth set of one word with another leading to "hearing" the difference in beginning sounds.)

e. Visual discrimination of words.

(The letter form is printed below the picture so that the child may refer to it in recognizing words beginning with that letter.)

2. Mimeographed Practice Sheets

a. Practice printing letter over object or part of body with which it is associated.

b. Practice printing letter to reinforce memory of configuration

c. Circle letter discriminated from other letter-forms

d. Circle word beginning with specified letter from other words

e. Auditory recognition of sound at beginning of word - pictures of illustrative words; print letter underneath

f. Auditory discrimination of sound at beginning of word assisted by visual clues of corresponding mouth set; print letter

g. Auditory discrimination of sound at beginning of word without visual clue of corresponding mouth set; print letter specified.

h. Associate letter with beginning sound in word. Connect given letter with corresponding illustration. Print letters corresponding to illustration.

i. Use device for reinforcement of associating sound and symbol.

3. Reading Charts

a. Recognize short vowels by configuration.
(Chart wherein letter-form is superimposed over key words and printed in corresponding color. Ex. red for apple; yellow for egg, etc.)

b. Recognize sound of short vowel.
(Chart wherein the word for the picture clue is shortened by the "Lazy Rabbit" with a gesture to stop at first, or beginning, sound.)

c. Blend short vowel with beginning consonant.
(Chart with list ba, ca, da, fa, etc. The child who cannot blend is assisted by the picture of a helping word at the top of the list. Ex. man. The child will say the word illustrated and repeat, but not sound the final sound. Then the child rhymes the ma with the list of syllables on the chart.)

d. Add final consonnant.
(Chart with approximately 8 simple words using the short vowel.)

e. Read simple vocabulary words in short sentences.

f. Recognize sound of long vowels.
(Chart with printed alphabet. Child says alphabet learning the long vowels as he comes to them in the alphabet.)

g. Blend long vowels with beginning consonnants.
(Charts as for short vowels)

h. Add vowel to form vowel digraph or "magic e" and then add final consonant.
(Learn rule: the first of the two vowels is long)

i. Read simple vocabulary words with long vowels in short sentences.

j. Discriminate between short and long vowels in words.
(Chart with alphabet at top- to use when there are two vowels in the word,- and with the short vowel key pictures at the bottom of the chart. In the middle a word is inserted into a slot. The child counts the number of vowels. If there are two vowels, he uses his ruler to connect the vowel in the word with the corresponding vowel at the top of the chart. If there is one vowel, he uses his ruler to connect the vowel in the word with the key picture at the bottom of the chart. He says the sound for the vowel - whether long or short- and then blends with the initial consonant sound. Finally he adds the final consonant and so completes the word.) This is an area of great confusion for the slow child and the chart has proven indisponsable)

4. Easy De-Coding Folders

These are needed for practice. They have been made for all words using the short vowels. They will be made for long vowels, and for words with consonant blends using long and short vowels.

Helping Joey in the Classroom, is a booklet of approximately 50 pages designed to provide suggestions for the classroom teacher to give assistance to the child who fails in areas indicated by the Kindergarten Screening Test. This would include:

A. Auditory Skills for the child who has a deficit in Discrimination (5) 15pp.

B. Visual Perception Methods for the child who reveals a deficit in Visual-Motor Coordination (2) and Visual Discrimination (4) 9pp.

C. Gross-Motor Training for the child who has poor Body Coordination (3) 33pp.

The six (6) areas in the Kindergarten Screening Test include the following subtests:

1. Cognitive: DIQ
   Verbal Fluency
   Writing name
   Writing numerals
   Following directions

2. Visual-Motor Coordination: Copying designs
   Copying letters and numerals
   Copying words
   Reversals
   Eye-hand coordination

3. Body Coordination: performance; posture; speech, vision; hearing

4. Visual Discrimination: Matching designs
   Matching words

5. Auditory Discrimination: Letter-sounds
   Initial consonant in word

6. Social-Emotional: Draw--a Man Test
   Dependency; withdrawal; frustration tolerance; aggresiveness; attention span

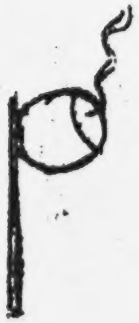
FLORENCE L. MAHON
Curriculum Coordinator

Cut out the letter on the back cover that fits over the pipe

- -

Fold up on the dotted line.
Staple to form pocket to store cut-out p.
Practice fitting this cut-out often as you proceed with other letters.

Circle the letter that looks like the pipe



p p p p

p c h p

f p p j

NAME _____

63

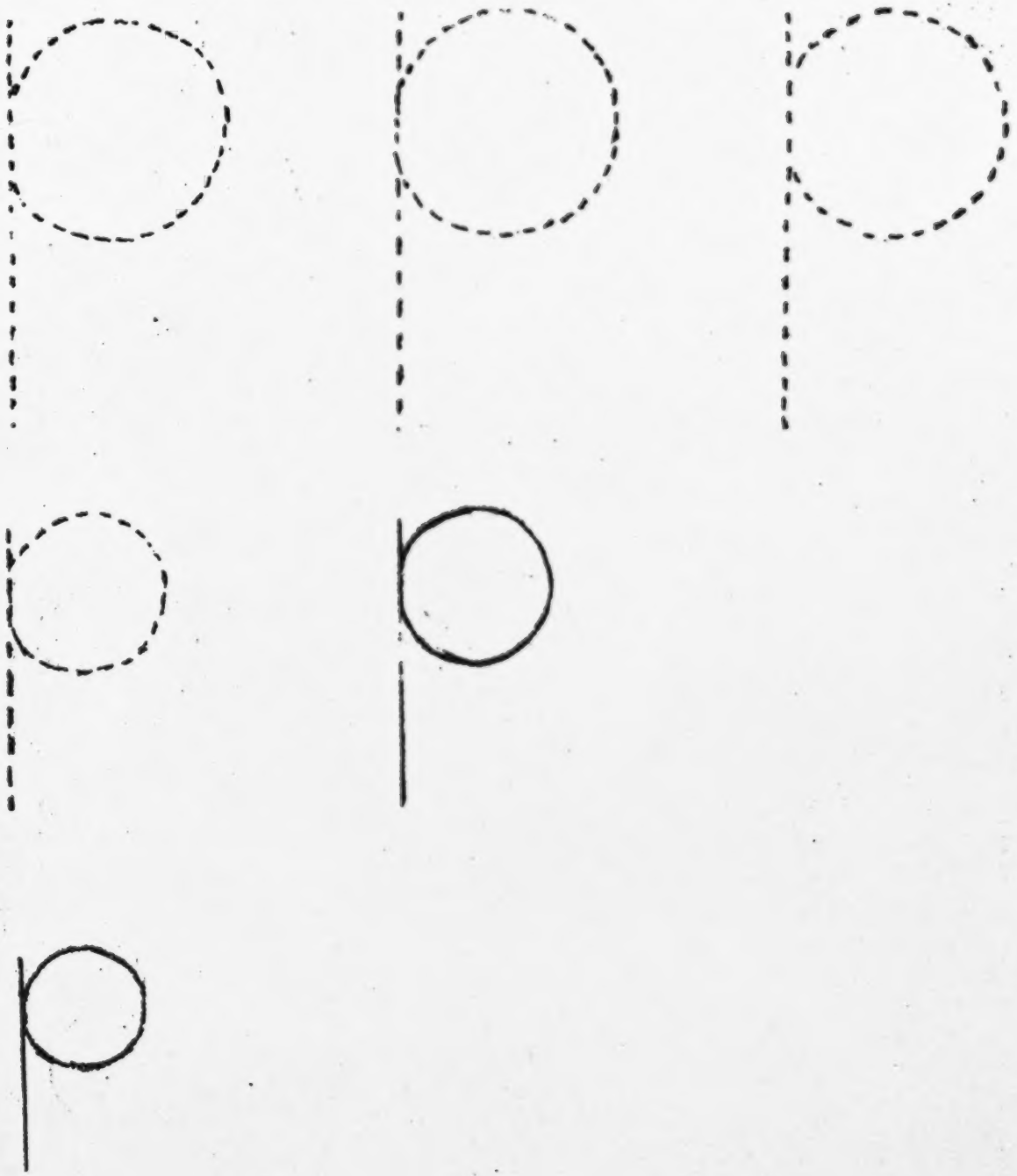
Circle the word that begins with p

pat	pan	ran
sun	tan	pet
pin	put	car
pen	fan	peg
mat	pal	van

NAME .....

4

Trace and print....



NAME _____

65

Name picture ; print p

5

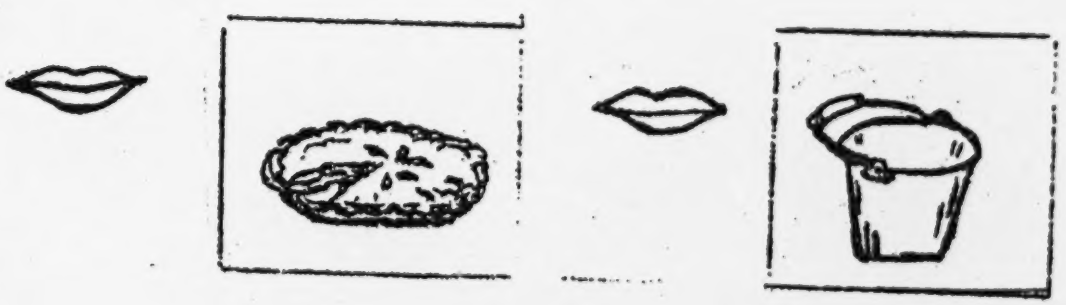
p _ _____

_____ _____

_____ _____

NAME _____

Name pictures; notice beginning puffing sound. 6
Color lips to show how puffing starts.
Print: p.



NAME _____ 67

Print p only beside the pictures whose names begin with the puffing sound. 7.

NAME